1: Gillin E-5 (1932-33)1936 SR9 Carib SR9

621 162 **External Contacts of the Settlement.** The Sawari settlement, with a population of twenty-six adults and twenty-one children, includes three residential clearings and several associated agricultural fields or gardens. As can be seen from Figure 9, a nearly straight line running from northeast to southwest can be drawn through the three clearings where the people live. The clearing occupied by John Miller, the headman of the whole settlement, lies farthest to the southwest. About a half-mile northeastward, separated by intervening jungle, is the house clearing of Edwin. And perhaps three-quarters of a mile northeastward of Edwin's house lies the clearing for the houses of John Cook, Henry Daniel, John and Daniel. This arrangement of the several divisions of the community is reflected in the social positions of the members affected thereby.

103 As is the case with all Carib settlements on the Barama, Sawari takes its name from the creek where the people get their water supply. The Sawari Creek, so named from the numerous sawari-nut trees (*Caryocar Pekea tuberculosa*) which grow along its banks, flows south of Miller's clearing, passes east of Edwin's clearing, and empties into the Barama at a point almost directly north of the latter.

361 Outside contact at the time of my appearance at Sawari was maintained with the settlements of Haiari and Kwamata across the river, and with Kurewa, which lies about midway between [487] Sawari and Towakaima itself. (See Figure 1.) An old trail running southwestward to the higher settlements of the upper Barama had not been used for several years, and the Sawari Caribs were completely out of touch with those farther up the river.

484 This section of the country is unmapped, and reliable estimates of linear distances are impossible without instruments because of the meandering courses which both the jungle trails and the streams pursue. Consequently, distances are usually spoken of by the Indians in terms of the length of time required for a reasonably swift man to cover them. On this basis Haiari is three hours [361] distant, but men travelling with loads usually take at least five hours or half a day. Kwamata is about six hours. Kurewa is about twelve hours, a long day away.

177 361 The source of such European influence as exists in this region is Towakaima. On the left bank of the river, at a distance of about

1: Gillin E-5 (1932-33) 1936 SR9 Carib SR9

in use, and two in the process of being cut. Edwin has an agricultural field in the clearing about his house and a newly cleared but unplanted field about a quarter of a mile northeast on the trail to the river. The houses of John Cook's group are set in a large newly planted field, a short distance from a recently abandoned agricultural clearing formerly used by Cook.

The clearing in which John Miller's and associated houses are located is elliptical in plan. Its largest axis, running north and south, measures two hundred and six feet. It is one hundred and thirty-six feet wide at point of greatest breadth. This open space in the jungle, of perhaps an acre, contains thirteen buildings.

In Figure 10 these buildings are designated by number. The normal use of the respective buildings is as follows.

Building	Use	Adult Occupants		Child Occupants (not yet pubescent)	
		Male	Female	Male	Female
1	Residence	Henry	Caroline		Margaret Elsa
2	Storehouse and workroom, formerly Miller's residence				
3	Drink house, shelters trough in which liquor is kept				
4	Residence	Samuel	Elizabeth		Katrina Mary
5	Residence	Miller	Mary Elizabeth Charlotte	Adolphus Charlie	Julia Christina Baby girl
6	Partly completed residence being built by Henry for Caroline				
7	Residence	Columbus			Susan
8	Residence	Joseph	Cecelia		Edna
9	Drink house				
10	Residence	David	Christina	Frederick	
11	Residence	Joseph			
12	Unoccupied				
13	Residence		Margaret		

1: Gillin E-5 (1932-33)1936 SR9 Carib SR9

621 Edwin's clearing is shown in Figure 11. It embraces three
●162 buildings, which are numbered on the Chart.
342 Adjoining Edwin's clearing to the north and northeast lie his fields. The area about his house, which is clear and unplanted, is roughly elliptical in shape and measures one hundred and thirty feet by ninety-five feet.

EDWIN'S CLEARING

Building	Use	Adult Occupants Male	Adult Occupants Female	Child Occupants Male	Child Occupants Female
14	Drink house sheltering liquor trough				
15	Small benab used as kitchen and as sleeping quarters for guests				
16	Residence	Edwin	Lulu	boy	girl girl girl

John Cook's is shown in Figure 12. It is the largest single clearing in the settlement, measuring nine hundred and fifty by six hundred and eighty feet. It is entirely planted with cassava and other crops, except for small areas around the seven buildings.

Sawari thus comprises a population of forty-seven individuals, of which twenty-six are adults and twenty-one children. Of the whole group, twenty are males, and twenty-seven females. There are thirteen men and seven boys; fourteen women and thirteen girls.

361 To my knowledge, there were in the winter of 1932–33 a total
162 of thirty-three Carib settlements on the Barama (Fig. 1). Of these I visited twenty-seven. According to my estimates, they range in size of population from seven (Waikarabi) to about seventy (Aranka at full strength).

621 **Consanguineal and Affilial Relationships** The settlement of Sawari is typical of the Carib villages on the Barama except for

1: Gillin E-5 (1932-33)1936 SR9 Carib SR9

773 headman therefore plugged his anus with mud. The Indians be-
539 lieve to this day that the sloth has no anus.

14. TRADITION CONCERNING ANTECEDENTS OF THE BARAMA CARIBS

173 A group of people were living a long time ago in the Cuyuni head, and for some reason were fighting among themselves continuously, killing people at an astonishing rate. Finally a mother and daughter and a father and son escaped, the males coming first, and made their way north to the Barama head. Here they inter-married, and from the head of the river the Caribs spread down toward the mouth.

This theory of origin is supposed to be confirmed by the fact that David (informant) had a relative, his father's brother-in-law, who had journeyed to the Cuyuni head and there seen what he considered miraculous evidence of that great historic period of fighting: tree stumps of rock, and mountains which were white as cotton. When asked in what way these phenomena confirmed the theory, David replied that they were so unusual that they showed something important had happened there.

174 (The spread of the Caribs from the Barama head rather than vice versa seems to agree with their present distribution, their absence below the mouth of the river and along the coast, and also with Schomburck's observations, that in 1842 the Caribs occupied the upper part of the river and the Akawais the lower.)[1]

PHYSICAL ANTHROPOLOGY

•162 THE data concerning the physical anthropology of the Barama
361 Caribs were collected as impartially as possible, with the object of presenting a fair description of the bodily features of the Indian population as it exists at the present time. According to the best estimates the total adult Carib population of the Barama numbers between 275 and 300 individuals. It was not without considerable difficulty that 206 subjects (104 males, 102 females) were finally measured, a difficulty which was due not to the personal objections of the subjects, which were easily overcome, but to the fact that the population is distributed among thirty-three settlements

[1] See Schomburgk, 1922–23, *Travels in British Guiana*, Vol. I, Chap. 6, Vol. II, Chap. 2.

1: Gillin E-5 (1932-33) 1936 SR9 Carib SR9

throughout an area of about four thousand square miles. All but eight of the known settlements were visited in person, and occasional individuals residing in the unvisited settlements were measured elsewhere. Owing to the smallness of the population and the difficulty of collecting data, it was deemed inadvisable to confine the selection of subjects to those showing only "pure Indian" traits. If such a selection had been followed, it would have been impossible to collect a sample of sufficient statistical size to provide a reliable picture of the present physical make-up of the population.[1]

Subjects were required to be recognized members of a Carib settlement on the Barama and to have an estimated age of at least eighteen in the case of females, and of at least twenty-one in the case of males. Cripples, defectives, and individuals who, even though they occupied adult social positions, appeared to be under the age limits, were eliminated. The amount of possible non-Indian blood in the sample thus obtained is indicated by the fact that, of the group of 104 males only 20 possessed the combination of straight, coarse, black hair. Of the 102 females only 14 possessed these characteristics. In sorting for individuals possessing the combination merely of straight, black hair, 28 out of 104 males in the sample appeared, and 33 out of a total of 102 females. Thus, if the possession of straight, black hair be assumed as the minimum criterion of racial purity, 27 percent of the male population and 32 percent of the female population were racially pure in this crude sense. There is no reason to believe that the proportions would have been radically altered had every adult individual in the area been measured.

Technique of measuring and observing followed that taught by Professor E. A. Hooton of Harvard University, and the recording was done on field blanks used by the Division of Anthropology of Harvard University. Head height was taken with the anthropometer, measuring from tragion to the top of the head. Recorders were Cedric Farnum, my guide, and Mr. S. Morgan Hills of Hartford, Connecticut, my companion during the last three months in the Barama country. The von Luschan porcelain color chart was used in determining skin color. The statistical computations on the raw data were done in the Harvard Anthropometric Labora-

[1] See Plates 27–30 for pictures of Carib physical types.

2: Adams E-4,5 (1970-1971) 1973 SR9 Carib SR9
(1932-1971) Barama River

III

SETTLEMENT PATTERN AND POPULATION SIZE

From 1932 to the present, the core of Carib people who have remained in the Upper Barama River area have been recruited from the indigenous population.[1] The continuity of the 1970-71 population with that existing in the Upper Barama River area during 1932-33 is readily apparent. First, one person in present at both time periods. Charlotte[2] was an adolescent wife of John Miller, the headman of Sawari, when Gillin made his study (1936:118). She is now a widow in her late fifties and lives with her two daughters and son-in-law at the Air Strip. Charlotte's son by Adolphus Miller, who took her as a wife when his father died, is also present. Two other children of John Miller, a son and a daughter whose mother was Charlotte's sister also are in residence at the Air Strip. These relationships are summarized in Figure 5.

Tracing the continuity in a different manner, Rosa Jacob is about sixty years old and is a prominent resident at the Air Strip. She can recall a kinship relationship to all of the other residents. She is a cross cousin to John Miller, his father's sister's daughter. Of course, all of these people except Rosa are deceased. Exact relationships among all individuals in the population cannot be established as memories are shallow regarding kinship. Nevertheless, it can be safely assumed that all members of the Upper Barama River Carib

[TEXT CONTINUED ON PAGE 38]

162 602 population are related in some manner.

In addition to a generational continuity of the human group 175 591 involved, there has also been a continuity in interaction. That is, 166 during the period under consideration, material exchanges and the migrations of individuals among Carib settlements in the Upper Barama area have been more pronounced than such exchanges with outside settlements. This permits the Upper Barama Caribs to be [121] identified as a single adapting population for the purpose of this *177 analysis (Rappaport 1969:184). However, the frequency of contacts 361 and the nature of movements among settlements have changed. Specifically, small, dispersed, semi-nomadic social units have given way to nucleations around centers where external resources are available. In this context, different settlement patterns would appear to represent different adaptations devised by the same group of people [161] to meet differing conditions. Differing rates of population growth also would appear to be the result of the changing circumstances.

Settlement Pattern

175 161 During 1932-33, Gillin estimates a Carib population of not more 361 than 600 for the entire Barama River area (1936:113). In all, thirty-three settlements were located along the Barama River (1936: 110). About ten[3] were above Tovakaima (see Figure 6). This includes the Savari[4] settlement for which more complete population data were 175 recorded. The population for this settlement consisted of forty-seven 161 individuals (1936:110). Since the primary adaptation was to the rain 162 361 forest, there were no reported concentrations of population in the

[TEXT CONTINUED ON PAGE 40]

2: Adams E-4, 5 (1970-1971) 1973 SR9 Carib SR9
(1932-1971) Barama River

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Figure 6. Map of Settlements,* 1932-33 (after Gillin 1936:2).

*Data are not available on the population sizes of these settlements. Individuals in settlements fluctuated between fifteen to fifty in number (Gillin 1934:333).

[162]

175 Upper Barama area. Rather, the settlements were dispersed along the
161 river corridor and varied in population size from fifteen to fifty
• 162 individuals (1934:333).[5] The Carib settlements were named for the
361 creek they were near (1936:98), and house structures were located in
[103] the cultivated fields. Thus, locations fluctuated around a creek as
well as among creeks. Accordingly, ten inhabited settlements in the
Upper Barama River area could be estimated to represent a population
[126] of perhaps 200. This number is also supported by geneaologies
recorded in 1970-71.

175 With respect to interactions among these settlements in the Upper
628 Barama River area, Gillin reports that the residents of Savari were
in contact with Haiari, Kwamata, and Kureva (1936:106). He also
reports that this group of Caribs was "completely out of touch with
those farther up the river" (1936:106).

Subsequent inquiry reveals this may not have been the case.[6]
Verbal communication as well as a recognition of kinship relation-
ships seem to have been maintained throughout the Upper Barama River
area during this early period. In 1970-71, one informant remembers
that as a small boy he accompanied an adult male relative on a walk
from one of the settlements in the upper section of the Upper Barama
*[177] River to visit other relatives in Savari. They were lured by news
of the white man (Gillin) living there and curious enough to go and
see for themselves. However, when they reached Savari, Gillin was
in Georgetown. The travelers had to content themselves with a close
examination of all the camp gear.

Contacts among the Carib settlements on the lower section of the

175 to employment opportunities. Around the mine In Time, a nucleation
*177 of population is clearly evident. The settlements further away from
361 the mine were the first abandoned. Many of these people left for Matthew's Ridge or the Cuyuni River. However, the employment and market opportunities at In Time attracted and supported the largest portion of the local Carib population.

*177 The permanent workers at In Time had no large farms. They resided
175 close to the mine and bought provisions. There were two of these
361 residential groupings, one around the mine and one at Big Creek. In
• 162 the spring of 1969, there were 103 residents near the mine and sixty-eight at Big Creek. Also, three satellite settlements dependent on frequent opportunities to sell provisions and occasional employment were located less than ten miles away from the mine. These were Aranka with a population of ninety and Baramita[7] with forty-seven (see Figure 8). In addition, fifty-three people were located at Baramita Air Strip itself. By this time the declining activities at the mine and the limited opportunities provided by the missionaries attracted some people to the Air Strip. The remaining population was located in more remote settlements including thirty-nine at Piai Creek, thirty-six at Korotoko, thirty-four at Barama Head, twenty-nine at Korisho, and five at Masvakai.[8] The average population size of
[D61] these more remote settlements was about thirty-five people.[9] Thus, the total population was 504.

*177 It must be noted that the Amerindian Captain has been active in
175 attempting to settle Carib people at the Air Strip. In 1969 he had
361 a measure of success among the 119 Caribs from the five settlements
622

[TEXT CONTINUED ON PAGE 46]

2: Adams E-4,5 (1970-1971) 1973 SR9 Carib SR9
(1932-1971) Barama River

TABLE 4

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POPULATION OF SETTLEMENTS, 1969

In Time	103
Big Creek	68
Aranka	90
Baramita	47
Baramita Air Strip	53
Piai	39
Korotoko	36
Barama Head	34
Karisho	29
Maswakai	5*
Total	504

*This number had been recently depleted by 32. These people along with the entire population of Anama, 32, and 19 from In Time had gone to Matthew's Ridge.

(166)

175 in the headwaters of the Barima River. He was able to convince
*177 several men from Cedar, one of the settlements, to cut a communal
361 farm at Black Water Creek, about two miles north of the air strip.
622 For a time, twenty-four people from Cedar were living there. Later, they went back to Cedar, only sporadically returning to camp out for a few days or so to make use of the facilities at the Air Strip. It is clear that this smaller Carib population from the headwaters of the Barima River remains peripheral in an analysis of cultural change among the Upper Barama River Caribs.

*177 Figure 9 summarizes the settlement pattern in the Upper Barama
175 area in 1969. The greatest nucleation of population occurred in
361 zone a. There, 171 people were directly supported by mining activi-
464 ties at In Time. In zone b, the larger but more dispersed population of 190 was more indirectly involved in the mining economy. Lastly, the remaining population of 143 was dispersed in five more independent settlements in the rain forest. Settlements are varied in purpose. However, the Upper Barama River Caribs as yet do not have two or more house sites where they engage in different activities.
(657) This occurs with the introduction of government programs and services at Baramita Air Strip.

*177 During 1970-71, the population located in the Upper Barama River
361 area was centralized in varying degrees around Baramita Air Strip
@ 162 (see Figure 10). In the summer of 1971, there were 333 residents at the Air Strip. Of this number, 232 are permanent residents. The remainder are mobile, part-time residents who also maintain farms in the more remote settlements. Also in the spring of 1971, Aranka had

[TEXT CONTINUED ON PAGE 50]

TABLE 5

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POPULATION OF SETTLEMENTS, 1970-71

Baramita Air Strip	333
Aranka	114
Baramita	69
Total	551*

*This number includes the old man and woman at Piai.

*177 a population of 114 and Baramita sixty-nine. These two settlements
361 also have mobile residents who have access to farms in still more
•162 remote areas. The latter include thirty-five inhabitants.[10] In
[161] total, there were 551 Carib people in the Upper Barama River area in 1971.

*177 Increasingly, the practice of abandoning a house site in the case
768 of a death is being neglected. A cemetery some distance away is
[764] being used at the Air Strip. Several older graves around house sites are disregarded. Apparently, priorities of location override this tradition.

*177 Figure 11 shows the current settlement pattern. Both zone a and
361 b have permanent residents. Zone c residents also make use of farms in either zone a or b. There is little direct movement between zone a and b. The partial centralization of population initiated by the local mining economy has been completed. Within the existing nucleation, the center has been changed from the mine to the air strip. The remaining population has been drawn into this locus. In contrast to the limited opportunities available at the mine, some of the
[657] opportunities at the Air Strip are public. That is, they are avail-
able to all Caribs. These new resources are the clinic, the school,
[464] and agricultural assistance. However, very few employment opportuni-
[241] ties are available at Baramita Air Strip. Bush farms must be maintained and returned to in the case of the permanent workers who had left aside subsistence in the rain forest.

Consequently, a pattern of dual residence appears to be emerging in response to resource development. The local Carib population has

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361 *177 more remote settlements, was somewhat checked by these markets for local commodities and temporary employment. In order to make use of the government programs and services and yet escape the diminished hunting and gathering opportunities, a pattern of dual residence appears to be emerging with the complete centralization of the Carib population around Baramita Air Strip.

Demographic Features

• 162 Attending these changes in settlement pattern are changes in population size and age structure. The Upper Barama River Caribs have not been an isolated reproductive population. Although both males and females have left the population, only males have joined it. Thus, for the time period under consideration, the reproductive potential of the females remaining in the population has been realized within the Upper Barama River area. Although the current population does not represent the total reproductive experience of the 1932-33 population, it can serve to give insight into the nature of the increase in population size.

121 16 It has been noted that the size of human populations is regulated by cultural practices (Lorimer 1954; Nag 1962) as well as physiological factors (Stott 1962). The present analysis addresses variations in the size of one population adapting to changing environmental conditions. This approach does not lack precedence (Wagley *177 1951; Hinshaw, Pyeatt, Habicht 1972). However, in this case data 162 from different time periods are available on a single, relatively small population. The change in size from about 200 to 551 can be

traced over a forty year period during which external resources have been added to those locall- available. Fortunately, the external resources under consideration, employment and exchange opportunities and medical care and other government services, have been introduced with sufficient separation in time so that their specific relationships with population changes can be investigated.[11]

In 1932-33, Gillin observed that the Upper Barama River Caribs were relatively unaffected by external influences (1936:111). Their population size reflected the local emphasis of their adaptation. As already mentioned, it can be estimated that there were about 200 Caribs in the Upper Barama River area during 1932-33. At this time the ratio of adults to children was about one to one (1936:204). For adult classification, Gillin required males to be over twenty-one and females over eighteen (1936:205).

For the Sawari settlement in the Upper Barama River area, Gillin recorded forty-seven individuals (1936:110). Of this group, twenty-six are adults and twenty-one are children. This includes thirteen men and seven boys, fourteen women and thirteen girls. In this instance, puberty distinguishes adult from child. For some individuals, Gillin estimates their age as an aspect of general description, but he does not do this for all individuals. Consequently, little can be said regarding a more accurate age structure for this early time period.

Regarding behavioral patterns that regulate population size, Gillin reports no restraints on the sexual activity of married partners except for an abstinence of about a month after the birth of

175 168 834 a child (1936:76). No adult of reproductive age seems to have remained for long outside of a marriage bond. Extramarital sexual encounters [837] [836] were not uncommon, and adolescents were not prevented from sexual experimentation (1936:72). The separation of sexual partners did not intervene to limit population size.

175 168 842 Contraceptive measures are reported to have been familiar to both men and women (1936:73). These include "bush medicines" and "ritualistic treatments" performed by a piaiman or shaman. However, the [756] exact species are not identified and their efficacy as well as the incidence of their use are not noted. Old women were reported to have [887] [847] been experienced in inducing abortions through the use of an infusion of bush herbs and manual manipulation including the insertion of small, sharp sticks.

175 145 168 Aside from these behavioral controls, there apparently were physiological factors at work. These are mentioned but their effects cannot be established. Gillin notes, for example, that it was rare for an adolescent girl to become pregnant (1936:73). Regarding this observation, Gillin suggests that temporary sterility and ineptness of technique may explain the lack of pregnancies. Also, the incidence [164] of malaria, hook worm, round worm, and other parasites may have contributed to periods of sexual inactivity and temporary sterility as well as affecting the mortality of infants and others.

175 162 In sum, for the 1932-33 period, those behavioral and physiological factors which affected population size were recorded without regard for their situational context. Still, the reproductive results seem clear: i.e., the ratio of adults to children was about one to one in

175 a population of approximately 200 people. This provided a density of
• 162 approximately one person per five square miles along the Upper Barama
[161] River corridor.

*177 Over time, with the introduction of external resources, this
162 relationship has been changed. The niche of the Upper Barama Caribs
was first extended by exchange and employment opportunities. Peberty's
observations (1948) on this population were made during the first ex-
[161] tensive involvement in employment. However, the data presented take
the form of estimates rather than actual figures.

114 Peberty visited the Upper Barama River area sometime between
161 December 1945 and February 1946 for the purpose of making suggestions
181 for Amerindian development. He reports that "The Upper Barama River
Caribs are the most impoverished and traumatic aboriginal group that
I have encountered throughout the length and breadth of British
Guiana" (1948:20). In part, he attributes this condition to the loss
of Carib crafts as a consequence of opportunities with the miners.
[165] Peberty reports further an unspecified but "relatively high" infant
mortality (1948:15). However, he provides no explanation. Also, he
suggests that a reputed decline in the population is related to the
"morbid conditions of these contemporary Carib groups" (1948:20). He
estimates about 474 Caribs for the Upper Barama River area and the
114 Barima tributaries (1948:15). Little can be said regarding population
161 increase or decrease at this time from his observations. However,
there is one indication that the population size reported by Gillin
[666] was little changed. In 1953, eighty-eight adults were registered to
vote in the Upper Barama River area.

175 Clearly by the 1940's, exchange and employment opportunities play
*177 an important role in respect to this Carib population's adaptation.
161 Men were being regularly engaged in mining activities and increasing
[464] numbers of them were permanent workers for Baird. Despite Peberty's
comments, there is evidence that the reproductive pattern was greatly
changed.

175 In 1960 government census provides the first evidence of this
*177 increase in population size. Unfortunately in this report, the
• 162 inhabitants between Kokerite and Towakaima were counted with the
Upper Barama River Caribs. In this larger group, there were 565
people, including 285 males and 280 females. As a partial indication
of what portion of these were in the Upper Barama River above
Towakaima, 142 adults from this area were registered to vote in 1961.
Table 6 presents the age structure and sex composition of the larger
[163] Carib group. Also, for the year preceding the census, there were 13
births all occurring to women under 45. Expressed as a crude birth
rate, this is 23.5 births per thousand total population.

175 In the investigation of the change in population size, it must be
657 pointed out that early health care was haphazard at best. Systematic
health care was not available until very recently. It should be noted
that 1960 was the first year the Malaria Eradication Programme was
175 extended into the Upper Barama area. At that time, 271 smears were
657 taken and 23 were positive for malaria. This is an incidence of
164 malaria for 8.6 percent of the population tested. The Malaria
Eradication Programme resumed in the Upper Barama area in the summer
of 1966. At that time, 314 people were tested. Of this number,

[TEXT CONTINUED ON PAGE 60]

2: Adams E-4,5 (1970-1971) 1973 SR9 Carib SR9
(1932-1971) Barama River

TABLE 6

175
162 AGE STRUCTURE AND SEX COMPOSITION OF THE CARIB INHABITANTS IN THE UPPER BARAMA RIVER DRAINAGE BASIN INCLUSIVE OF AND ABOVE KOKERITE, 1960*

	male	percent of total male	female	percent of total female
65 and over	3	1.1	0	0
45-64	25	8.8	21	.5
15-44	116	40.7	120	42.9
2-14	128	44.9	125	44.6
under 2	13	4.6	14	5
Totals	285		280	

Complete Population Total 565

*table compiled from pages 5-31 and 5-32 of the 1960 Government Census

common among all children in the age range from about eighteen months to four years. These children no longer nurse and yet are not old enough to effectively gather casual protein and other foods on their own. However, if a family's subsistence crisis becomes extended, a child in this age range may be given up for adoption, usually by a family of immediate kinsmen. Three cases of such adoption recently occurred among the segment of the population at the Air Strip. Consequently, the protein deprivation of children was not sufficient to cause any deaths during August 1970 to July 1971. For this period, two deaths occurred in the total population. Both were in the age category of over sixty-five.

Clearly, health programs cannot be held responsible for any major changes in population size which occurred before 1960. Health care has been introduced only in the last years and certainly has influenced the mortality rate of infants and others. Nevertheless, the change in the pattern of reproduction occurred previous to these health measures, as will be apparent from data collected among the population in question during 1970-71.

During 1971, there were 551 Caribs in the Upper Barama River drainage basin. This number includes 280 males and 271 females. The age structure and sex composition for the total population are presented in Table 7. Table 8 reports the age structure and sex composition for the segment of the population at Baramita Air Strip; Table 9, for the remaining population in the satellite settlements.

As is clear, 264 or 47.9 percent of the total population is under ten years of age. Also, it is apparent that this larger proportion

[TEXT CONTINUED ON PAGE 65]

2: Adams E-4,5 (1970-1971) 1973 SR9 Carib SR9
(1932-1971) Barama River

TABLE 7

AGE STRUCTURE AND SEX COMPOSITION
FOR UPPER BARAMA RIVER CARIB POPULATION, 1971

• 162

	male	percent of total male	female	percent of total female
75 and over	1	.4	1	.4
70-74	2	.7	1	.4
65-69	3	1.1	3	1.1
60-64	5	1.8	2	.7
55-59	5	1.8	3	1.1
50-54	6	2.1	1	.4
45-49	7	2.5	9	3.3
40-44	5	1.8	11	4.1
35-39	10	3.6	13	4.8
30-34	3	1.1	17	6.3
25-29	21	7.5	19	7.0
20-24	23	8.2	22	8.1
15-19	20	7.1	24	8.9
10-14	25	8.9	25	9.2
5-9	55	19.6	38	14.0
0-4	89	31.8	82	30.3
Totals	280		271	
[161] Complete Population Total	551			

2: Adams E-4,5 (1970-1971) 1973 SR9 Carib SR9
(1932-1971) Barama River

TABLE 8

AGE STRUCTURE AND SEX COMPOSITION
OF BARAMITA AIR STRIP POPULATION, 1971

	male	percent of total male	female	percent of total female
70-74	1	.6	1	.6
65-69	2	1.1	2	1.3
60-64	5	2.9	1	.6
55-59	5	2.9	3	1.9
50-54	2	1.1	1	.6
45-49	4	2.3	3	1.9
40-44	4	2.3	9	5.7
35-39	4	2.3	6	3.8
30-34	3	1.7	8	5.0
25-29	16	9.2	15	9.4
20-24	11	6.3	13	8.2
15-19	13	7.5	16	10.1
10-14	17	9.8	21	13.2
5-9	33	19.0	22	13.8
0-4	54	31.1	38	23.9
Totals	174		159	
Complete Population Total		333		

2: Adams E-4,5 (1970-1971) 1973 SR9 Carib SR9
(1932-1971) Barama River

TABLE 9

AGE STRUCTURE AND SEX COMPOSITION
FOR SATELLITE SETTLEMENTS POPULATION, 1971

• 162
361

	male	percent of total male	female	percent of total female
75 and over	1	.9	1	.9
70-74	1	.9	0	0
65-69	1	.9	1	.9
60-64	0	0	1	.9
55-59	0	0	0	0
50-54	4	3.8	0	0
45-49	3	2.8	6	5.4
40-44	1	.9	2	1.8
35-39	6	5.7	7	6.2
30-34	0	0	9	8.0
25-29	5	4.7	4	3.6
20-24	12	11.3	9	8.0
15-19	7	6.6	8	7.1
10-14	8	7.5	4	3.6
5-9	22	20.8	16	14.3
0-4	35	33.0	44	39.3
Totals	106		112	

Complete Population Total 218

of children occurs throughout the segments of this population. The Air Strip population of 333 has 164 or 49.0 percent under ten. The remaining population of 218 in the satellite settlements includes 117 under ten. This is 53.7 percent of this portion of the population. As is apparent, the increase in population size and the change in reproductive pattern responsible for it have occurred commonly among the Upper Barama River Carib population.

With regard to the current reproductive pattern, a married state continues to be common for all adults of reproductive age. Also, there are no restrictions on the sexual activity of married couples, and the practice of couvade which rendered a father inactive in all ways for a few weeks after the birth of his child is being abandoned. Extramarital sexual encounters are common among all ages. Nevertheless, young women become pregnant for the first time usually between the ages of eighteen and twenty-two. After this, they have about twenty-five reproductive years during which a woman tends to give birth to a child every twenty to thirty months.[12] According to this pattern, every fertile woman has the potential to reproduce about twelve to thirteen children.[13] The women in monogamous as well as polygynous unions tend to realize this potential. Solien de Gonzáles (1966) has suggested that long term, intensive lactation may supress ovulation. Although the interplay of behavioral and physiological factors may be complex, the reproductive results in this case are clear.

In the general ratio of women to children in the total population, there are eighty-two women between the ages of twenty and forty-four,

and 171 children in the age category of four years and under. Of course, this discounts incidences of mortality as well as the passage in and out of these age categories with time. More specifically, from July 1970 through June 1971, twenty-five children were born to the segment of the Carib population at Baramita Air Strip. Expressed as a crude birth rate, this is eighty-three births per 100 population. Expressed as a general rate of birth,[14] in this case the ratio of births to women between ages twenty and forty-four, this is 490.3 births per 1000 women. At this rate of growth, coupled with the current negligible rate of mortality, this population will double in size about every ten years or until limiting factors intervene.

The reproductive histories of the women at Baramita Air Strip allow a closer focus on this new reproductive pattern. Among this segment of the population, sixty-three women have borne children.[15] The reproductive histories of fifty-nine of these women were collected and are presented in Table 10. The age categories selected are under twenty-five, twenty-five to thirty-nine, forty to fifty-four, and fifty-five and over. Organized in this manner, it is clear that the reproductive careers that occurred after 1940 are quite different from reproductive careers that did not. The women in the younger age category, forty to fifty-four, show clear evidence of the new reproductive pattern of twenty to thirty month intervals between births. The oldest woman in this group is estimated to be fifty-one. Accordingly, all of these women began reproducing after the availability of employment and market opportunities with the mining companies.

2: Adams E-4,5 (1970-1971) 1973 SR9 Carib SR9
(1932-1971) Barama River

NOTES

175 162 114 [173] [1]It is improbable that the exact history of the current Upper Barama River Carib population can be established. Schomburgk, during his surveying of the North West District in the 1840's, found Akawai as well as Carib settlements on the Barama River (1848:359-363). Gillin, of course, found only Carib settlements in 1932-33 and suggests that the Caribs usurped the Akawai position in the area. Gillin records a local tradition that the first Carib ancestors migrated from around the head of the Corentyne River to the Barama River and concludes that the ancestors of the Carib population had been in the area only for about 200 years (1936:113).

162 166 [173] During the 1970-71 field work, it was discovered that several male Carib ancestors with significant numbers of offspring in the current population had migrated into the Upper Barama River area from the Pomeroon River area. Some had done this to escape the widespread influenza epidemic after World War I. Also, at least some Caribs currently maintain that according to tradition, the first ancestors to populate the Upper Barama River area came either from Venezuela or the Cuyuni River area. In any case, the question of these origins does not pertain to the analysis being developed.

000 [551] [2]Carib nicknames remain in use (Gillin 1936:77-78). Individuals guard the privacy of these names to different degrees. Western names are also used. In addition to a chosen first name, the father's first name is usually taken as a last name. Thus Manuel Jacob's son is called Francis Manuel.

[103] [3]In addition to nine obvious Carib settlements in the Upper Barama River area, Gillin includes the location of "John's Settlement" and "Old World" with no indication of their nature (1936:2). Their names highly suggest mining camps of some sort.

Also, Gillin reports the abandonment of two settlements, Massewah (same as Maswakai) and Korotoko (1936:125,135), which were subsequently reinhabited. In consideration of all of these factors, the estimated figure of ten inhabited settlements appears to be appropriate.

[103] [4]The Upper Barama River Caribs explain that the Carib name for this settlement is Sewalipialu and that the abbreviation Sawari is used with non-Carib people. The shorter name, consistent with Gillin's usage, is maintained here.

[5]Gillin later revises this estimated range to seven to seventy individuals (1936:98), but the first more conservative estimate of settlement size appears to be more appropriate for the Carib settlements in the Upper Barama River area.

[36] [103] [197] [6]It must be pointed out that the Carib people recognize a distinction between the group of settlements in the upper section and the lower section of the Upper Barama River. They refer to the former as Barama Top Side and the latter as Barama Bottom Side and claim

C E L R 101

Boni
Emerillon SQ8
Rucuyen SR12
Carib SR9
Locono SR10

/11 cont./

3) The autochthonous Indians are represented on the Maroni Basin by three groups:

C [13] [162] [433] [177] [178]

—The Arawak and the Kalifia (Galibi) (about 500 persons) live downstream from Saint-Laurent; they live in symbiosis with the population of the city, whom they supply with fish and manioc. A century of contact with the Creole population has produced a certain alteration in their customs and traditional way of life, but the essentials of their tribal organization remain intact.

R [131] [162] [178]

—The Oayana /Oyana/ or Roucouyennes /Rucuyen/ (about 250 persons) live on the Litani upstream from the Boni with whom they are in close relationship. They have not undergone any alteration in their race or their way of life.

E [131]

—The Emerillon, who belong to the Tupi-Guarani group, form a small grouping on the way to extinction.

B 114

The Refugee Blacks. —Ethnic origin. No comprehensive anthropological study has as yet been undertaken on the Refugee Blacks. Not possessing the specialized knowledge necessary for tackling this study, we have left it entirely aside. Besides, we doubt that it would give important detailed information on the ethnic origin of the Refugee Blacks. Study of archive documents concerning the slave trade would certainly give more particulars; it is certain from now onwards that their origin is very diverse; the slave traders took on provisions principally on the coast of West Africa, but also in the Congo and in present-day Angola; the African words figuring in the present dialects come from the populations of these various regions. So it is not surprising to meet rather variable skull forms and statures among the Refugee Blacks.

B 175 144 [192]

B 141

The Refugee Blacks are in general of medium stature, that of the adult men being between 1 meter 60 and 1 meter 75; the average is a little below 1 meter 70.